Claims

[c1]   1. A moveable partition arrangement comprised of a first partition having a drive mechanism for altering the position of said first partition, a member, a distance sensing device on at least one of said first partition and said member for sensing the distance between said partition and said member, and a control carried by said first partition for operating said drive in response to an input signal to maintain a predetermined distance between said first partition and said member.

[c2]   2. A moveable partition arrangement as set forth in claim 1 wherein the distance sensing device comprises a non-contact sensor.

[c3]   3. A moveable partition arrangement as set forth in claim 2 wherein the non-contact sensor has a transmitter for transmitting reflective signals to the component that does not carry it and a receiver for receiving signals reflected from the component that does not carry it.

[c4]   4. A moveable partition arrangement as set forth in claim 1 wherein the member comprises a second partition having a second drive mechanism for altering its posi-

tion, a second control for operating said second drive mechanism.

[c5] 5. A moveable partition arrangement as set forth in claim 4 further including a third partition positioned on the side of said first partition opposite to said second partition and a third drive mechanism for altering its position, a third control for operating said third drive mechanism.

[c6] 6. A moveable partition arrangement as set forth in claim 5 wherein the control operates the third drive to maintain no less than a predetermined distance between said third partition and the first partition.

[c7] 7. A moveable partition arrangement as set forth in claim 6 further including a fixed partition on the side of said third partition opposite the first partition and the third control maintains no less than a predetermined distance between said third partition and the fixed partition.

[c8] 8. A moveable partition arrangement as set forth in claim 7 wherein the third control moves the third partition toward the fixed partition when the first control is moving the first partition away from the second partition and toward the fixed partition.

[c9] 9. A moveable partition arrangement as set forth in claim 8 wherein the third control stops the movement of said

third partition toward the fixed partition when the pre-determined position of the third partition is reached even if the first partition continues to move toward the third partition.

[c10] 10. A moveable partition arrangement as set forth in claim 9 wherein the first control stops the movement of the first partition when it reaches a predetermined mini-mum distance from the third partition even if the input signal calls for further movement.

[c11] 11. A moveable partition arrangement as set forth in claim 1 wherein the drive mechanism comprises a pair of transversely spaced, separately driven ground engaging members and the distance sensing device comprises a pair of position sensors provided at transversely spaced positions on the first partition acting with a fixed planar surface to provide respective distance signals indicative of the distances between said sensors and the planar surface, and the control controlling the speed of said driven ground engaging devices to maintain parallel movement of said partition.

[c12] 12. A moveable partition arrangement as set forth in claim 11 wherein the position sensors comprise non-contact sensors.

[c13] 13. A moveable partition arrangement as set forth in claim 12 wherein the non-contact sensors each have a transmitter for transmitting reflective signals to the fixed planar surface and a receiver for receiving signals reflected from the fixed planar surface.

[c14] 14. A moveable partition arrangement as set forth in claim 13 wherein the member comprises a second partition having a second drive mechanism for altering its position, a second control for operating said second drive mechanism.

[c15] 15. A moveable partition arrangement as set forth in claim 14 further including a third partition positioned on the side of said first partition opposite to said second partition and a third drive mechanism for altering its position, a third control for operating said third drive mechanism.

[c16] 16. A moveable partition arrangement as set forth in claim 15 wherein the control operates the third drive to maintain no less than a predetermined distance between said third partition and the first partition.

[c17] 17. A moveable partition arrangement as set forth in claim 16 further including a fixed partition on the side of said third partition opposite the first partition and the

third control maintains no less than a predetermined distance between said third partition and the fixed partition.

[c18]   18. A moveable partition arrangement as set forth in claim 17 wherein the third control moves the third partition toward the fixed partition when the first control is moving the first partition away from the second partition and toward the fixed partition.

[c19]   19. A moveable partition arrangement as set forth in claim 18 wherein the third control stops the movement of said third partition toward the fixed partition when the predetermined position of the third partition is reached even if the first partition continues to move toward the third partition.

[c20]   20. A moveable partition arrangement as set forth in claim 19 wherein the first control stops the movement of the first partition when it reaches a predetermined minimum distance from the third partition even if the input signal calls for further movement.

[c21]   21. A moveable partition comprised of a partition member, at least a pair of driven ground engaging devices for moving said partition along a surface, a pair of position sensors provided at transversely spaced positions on

said partition acting with a fixed planar surface to provide respective distance signals indicative of the distances between said sensors and the planar surface, and a control for controlling the speed of said driven ground engaging devices to maintain parallel movement of said partition.